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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,577	08/17/2001	Shinji Negishi	SON-2196	2196

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EXAMINER
VAN HANDEL, MICHAEL P

ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/931,577	NEGISHI ET AL.	
	Examiner	Art Unit	
	Michael Van Handel	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to an Amendment filed 1/31/2007. Claims **1-52** are pending. Claims **53-77** are canceled.

Response to Arguments

Applicant's arguments, see pages 19-21, filed 1/31/2007, with respect to the rejections of claims **1-52** under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a reinterpretation of the teachings of Tracton et al. in view of Basch et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tracton et al. (U.S. 6470378 B1) in view of Basch et al. (U.S. 7012982 B1).

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Referring to claim 1, Tracton teaches a data transmission system having a transmitting apparatus that transmits a scene description which describes the structures of one or more signals to be used to construct a scene (Figure 4 teaches a server element 100 that transmits a scene description via the Internet to the client element 102, Column 7 lines 46-52 teaches MPEG encoding being used to transmit the broadcast, The scene description corresponds to PID, PAT, CAT, and PMT packets of the MPEG data stream, The signals are the elementary streams being sent in the MPEG data stream), and a receiving apparatus that constructs the scene according to the scene description (The receiving apparatus is the client element 102 and Column 5 lines 66-67 and Column 9 lines 44-55 teaches program software on the clients device, This software uses the receiving scene description; i.e. PAT, PID, CAT, and PMT to reconstruct the scene), wherein:

said transmitting apparatus has a scene description processing means (Figure 4 elements 118) that transfers a scene description which conforms to the state of a transmission line (Column 3 lines 58-62) and/or a request issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43).

Tracton fails to teach and appends time information to data including said scene description;

said receiving apparatus monitors said data including said time information, sent [by] said transmitting apparatus and detects a delay in transmission in terms of said time information.

In an analogous art Basch et al. discloses appending time information to data including said scene description (col. 1, l. 42-45; col. 2, l. 60-67 teaches that the MPEG-2 and MPEG-4 standards call for multimedia data to be coded and stored in discrete packets and that each data

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packet provides for a clock-stamp reference value in which a time reference value from the source device's clock can be stored prior to transmission across a network). Basch et al. further discloses that the time information is monitored to detect delays in transmission in terms of said time information (col. 3, l. 11-30, 42-51; col. 4, l. 3-25 teaches calculating jitter values (non-constant network delays col. 1, l. 62-63) for data packets).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined system of Tracton using the transmission detection with time data system of Basch for the purpose of reducing jitter in a MPEG data transmissions due to non-constant network delays (Column 2 lines 13-15, Basch).

Referring to claim 2, depending on claim 1, Tracton teaches a data transmission system according to claim 1, further comprising a memory means (Figure 4 teach elements 122, 124, and 126) in which a plurality of predefined scene descriptions is stored (Column 4 line 27-32 teach the memory is an inherent feature in order to store predefined scene descriptions for a client), wherein: said scene description processing means (Figure 4 element 118) selects a scene description from among the plurality of scene descriptions stored in said memory means (Column 4 lines 60-62)

Referring to claim 3, depending on claim 1, Tracton teaches a data transmission system further comprising a memory means in which a plurality of predefined scene descriptions is stored, wherein: said scene description processing means converts a predefined scene description read from said memory means into another scene description (Column 7 lines 37-41).

Referring to claim 4, depending on claim 1, Tracton teaches a data transmission system according to claim 1, wherein said scene description processing means encodes a scene description and transfers the resultant scene description (Column 7 lines 62-65 teaches encoding the original source with spatial scalability)

Referring to claim 5, depending on claim 1, Tracton teaches a data transmission system according to claim 1, wherein: said transmitting apparatus includes a signal processing means that transfers one or more signals (Figure 4 element 118), which conform to the state of a transmission line (Column 3 lines 58-62) and/or a request issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43), as one or more signals to be used to construct a scene (The MPEG data being transmitted includes the signals i.e. the elementary streams); and said scene description processing means transfers a scene description that conforms to a transmission rate for a signal transferred from said signal processing means (Column 3 lines 40-55 and Column 7 lines 35-43 and Column 3 lines 58-62).

Referring to claim 6, depending on claim 1, Tracton teaches wherein: said transmitting apparatus includes a signal processing means that transfers one or more signals (Figure 4 element), which conform to the state of a transmission line and/or a request issued from said receiving apparatus (Column 3 lines 40-55 and Column 7 lines 35-43), as one or more signals to be used to construct a scene (The MPEG data being transmitted includes the signals i.e. the elementary streams); and said scene description processing means transfers a scene description

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that includes information necessary for said receiving apparatus to decode the signals transferred from said signal processing means (The scene description according to MPEG standard description is packets that carry PMT, PAT, CAT which tell the decoder how to decode the receiving packet).

Referring to claim 7, depending on claim 1, Tracton teaches a data transmission system, wherein: said transmitting apparatus includes a signal processing means that transfers one or more signals, which conform to the state of a transmission line and/or a request issued from said receiving apparatus, as one or more signals to be used to construct a scene (See rejection of claim 6); and said scene description processing means transfers a scene description that specifies whether the signals to be used to construct a scene are used or not (According to the MPEG standard in order to reconstruct the scene the decoder at the receiver relies on PAT, CAT & PMT of the MPEG packets, therefore packets which PAT, CAT, PMT is the signal to be used in to construct the a scene).

Referring to claim 8, depending on claim 1, Tracton teaches a data transmission system, wherein said scene description processing means transfers a scene description whose complexity conforms to the state of a transmission line and/or a request issued from said receiving apparatus (Column 7 lines 35-43 and Column 3 lines 58-62).

Referring to claim 9, depending on claim 8, Tracton teaches a data transmission system, wherein said scene description processing means transfers a scene description (Column 3 lines

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42-55), with which a first part scene within a scene is replaced with a second part scene whose complexity is different from the complexity of the first part scene, in conformity with the state of a transmission line and/or a request issued from said receiving apparatus (Column 7 lines 65-67 and Column 8 lines 1-2 teach adjusting the level of detail which is within the scene).

Referring to claim **10**, depending on claim 8, Tracton teaches a data transmission system, wherein said scene description processing means transfers a scene description, with which a part scene within a scene is removed (Column 7 lines 65-67 teaches low-resolution data being presented which means part of the scene was removed), in conformity with the state of a transmission line and/or a request issued from said receiving apparatus (Column 7 lines 35-43 and Column 3 lines 58-62).

Referring to claim **11**, depending on claim 8, Tracton teaches a data transmission system according to claim 8, wherein said scene description processing means modifies a quantization step (Column 7 lines 35-53 teaches modifying the quality of the scene by server element 100 which includes web server element 118), at which a scene description is encoded (Column 7 lines 35-53 teaches MPEG data streams which are encoded data streams), in conformity with the state of a transmission line and/or a request issued from said receiving apparatus (Column 7 lines 35-43 and Column 3 lines 58-62).

Referring to claim **12**, depending on claim 1, Tracton teaches a scene description is divided into a plurality of decoding units because of a request issued from said receiving

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apparatus, and then transfers the resultant scene description (Column 7 lines 50-54 teaches encoding using MPEG-4 which means a scene description is divided in a plurality of macro blocks/decoding units, MPEG by definition is made up of decoding units or macro blocks which are each decoding units and each of these units make up a scene, Column 3 lines 39-44 teaches a request is made).

Referring to claim 13, depending on claim 12, Tracton teaches a data transmission system according to claim 12, wherein said scene description processing means adjusts a time interval between time instants at which said receiving apparatus decodes each of the plurality of decoding units into which a scene description is divided (col. 7, l. 57-62 teaches temporal scalability of the bit stream for allowing the server an additional option for quickly sending suitable data to the client).

Referring to claim 14, Tracton teaches a method for transmitting a scene description that describes the structures of one or more signals to be used to construct a scene, and constructing the scene according to the scene descriptions (Figure 4 teaches a server element 100 that transmits a scene description via the Internet to the client element 102, Column 7 lines 46-52 teaches MPEG en-coding being used to transmit the broadcast The scene description corresponds to PID, PAT, CAT, and PMT packets of the MPEG data stream, The signals are the elementary streams being sent in the MPEG data stream; The receiving apparatus is the client element 102 and Column 5 lines 66-67 and Column 9 lines 44-55 teaches program software on the clients

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device, This software uses the receiving scene description; i.e. PAT, PID, CAT, and PMT to reconstruct the scene), wherein:

a scene description that conforms to the state of a transmission line (Column 3 lines 58-62) and/or request issued from a receiving side is transmitted (Column 3 lines 40-55 and Column 7 lines 35-43);

Tracton fails to teach time information is appended to transmitting data including said scene description; and said time information is monitored to detect delays in transmission in terms of said time information.

In an analogous art Basch et al. discloses appending time information to data including said scene description (col. 1, l. 42-45; col. 2, l. 60-67 teaches that the MPEG-2 and MPEG-4 standards call for multimedia data to be coded and stored in discrete packets and that each data packet provides for a clock-stamp reference value in which a time reference value from the source device's clock can be stored prior to transmission across a network). Basch et al. further discloses that the time information is monitored to detect delays in transmission in terms of said time information (col. 3, l. 11-30, 42-51; col. 4, l. 3-25 teaches calculating jitter values (non-constant network delays col. 1, l. 62-63) for data packets).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined system of Tracton using the transmission detection with time data system of Basch for the purpose of reducing jitter in a MPEG data transmissions due to non-constant network delays (Column 2 lines 13-15, Basch).

Referring to claim 15, depending on claim 14, see rejection of claim 2.

Referring to claim **16**, depending on claim 14, see rejection of claim 3.

Referring to claim **17**, depending on claim 14, see rejection of claim 4.

Referring to claim **18**, depending on claim 14, see rejection of claim 5.

Referring to claim **19**, depending on claim 14, see rejection of claim 6.

Referring to claim **20**, depending on claim 14, see rejection of claim 7.

Referring to claim **21**, depending on claim 14, see rejection of claim 8.

Referring to claim **22**, depending on claim 21, see rejection of claim 9.

Referring to claim **23**, depending on claim 21, see rejection of claim 10.

Referring to claim **24**, depending on claim 21, see rejection of claim 11.

Referring to claim **25**, depending on claim 14, see rejection of claim 12.

Referring to claim **26**, depending on claim 25, see rejection of claim 13.

Referring to claim 27, see rejection of claim 1.

Referring to claim 28, depending on claim 27, see rejection of claim 2.

Referring to claim 29, depending on claim 27, see rejection of claim 3.

Referring to claim 30, depending on claim 27, see rejection of claim 4.

Referring to claim 31, depending on claim 27, see rejection of claim 5.

Referring to claim 32, depending on claim 27, see rejection of claim 6.

Referring to claim 33, depending on claim 27, see rejection of claim 7.

Referring to claim 34, depending on claim 27, see rejection of claim 8.

Referring to claim 35, depending on claim 34, see rejection of claim 9.

Referring to claim 36, depending on claim 34, see rejection of claim 10.

Referring to claim 37, depending on claim 34, see rejection of claim 11.

Referring to claim **38**, depending on claim 27, see rejection of claim 12.

Referring to claim **39**, depending on claim 38, see rejection of claim 13.

Referring to claim **40**, see rejection of claim 1.

Referring to claim **41**, depending on claim 40, see rejection of claim 2.

Referring to claim **42**, depending on claim 40, see rejection of claim 3.

Referring to claim **43**, depending on claim 40, see rejection of claim 4.

Referring to claim **44**, depending on claim 40, see rejection of claim 5.

Referring to claim **45**, depending on claim 40, see rejection of claim 6.

Referring to claim **46**, depending on claim 40, see rejection of claim 7.

Referring to claim **47**, depending on claim 40, see rejection of claim 8.

Referring to claim **48**, depending on claim 47, see rejection of claim 9.

Referring to claim **49**, depending on claim 47, see rejection of claim 10.

Referring to claim **50**, depending on claim 47, see rejection of claim 11.

Referring to claim **51**, depending on claim 40, see rejection of claim 12.

Referring to claim **52**, depending on claim 51, see rejection of claim 13.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

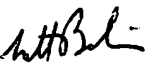
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH


SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER